

## ABSTRACT (U)

Attempting to verify a claim by the Chinese that light is emitted in the vicinity of correctly identified remote viewing (RV) target material, we repeated an experiment first published in FY 1984. In that earlier experiment, a state-of-the-art, ambient temperature, photon counting system was used to monitor the target material (35-mm slides of National Geographic Magazine photographs). The statistical measure derived from the photon counting apparatus in that study showed a significant positive correlation with the RV results (p  $\leq$  0.035). That is, when the remote viewing was good, there was an increase in the signal detected by the photon counting system. In addition, we observed two anomalous pulses having a signal-to-noise ratio of about 20:1 to 40:1. In the present experiment (FY 1987), we improved all hardware aspects of the previous work, substantially reducing the background noise level and improving shielding against artifact. In addition, analysis of the remote viewing indicates that three out of the four viewers produced independently significant results. Our analysis of the photomultiplier tube (PMT) data shows no evidence of any anomalous high count rate pulses, no evidence of any effect on the PMT output during the RV session, and no evidence of any significant correlation between RV performance and PMT output. We conclude that (1) the effect proposed by the Chinese is artifactual in nature.

## III RESULTS (U)

## A. (U) Remote Viewing Results

(U) Each RV session was judged using an FM analysis. The FM is defined as the product of two measures: accuracy and reliability. The accuracy of an RV response is the fraction of the target material that is described correctly. Reliability is the fraction of the response that is correct. Tables I through 4 show the RV results for each trial. The session number (9001.cr, for example) incorporates a code for each viewer as well as the chronological sequence of viewings.

Table 1
(U) REMOTE VIEWING RESULTS FOR VIEWER 009

| Session            | Figure of Merit | p-value |  |  |
|--------------------|-----------------|---------|--|--|
| 9001.lg            | 0.5714          | 0.0238  |  |  |
| 9002.1g            | 0.3810          | 0.1961  |  |  |
| 9003.lg            | 0.4444          | 0.0497  |  |  |
| 9004.lg            | 0.3333          | 0.3650  |  |  |
| 9005.lg            | 0.0667          | 0.9233  |  |  |
| 9006.lg            | 0.3556          | 02697   |  |  |
| Overall p ≤ 0.0450 |                 |         |  |  |

Table 2

(U) REMOTE VIEWING RESULTS FOR VIEWER 105

| Session            | Figure of Merit | p-value |  |
|--------------------|-----------------|---------|--|
| 9001.rs            | 0.4571          | 0.0412  |  |
| 9002.rs            | 0.1667          | 0.3486  |  |
| 9003.rs            | 0.1600          | 0.3618  |  |
| 9004.rs            | 0.3333          | 0.1039  |  |
| 9005.rs            | 0.0000          | 1.0000  |  |
| 9006.rs            | 0.3810          | 0.0475  |  |
| Overall p ≤ 0.0488 |                 |         |  |

Table 3

(U) REMOTE VIEWING RESULTS FOR VIEWER 177

| Session            | Figure of Merit | p-value |  |
|--------------------|-----------------|---------|--|
| 9001.hs            | 0.4444          | 0.2430  |  |
| 9002.hs            | 0.1143          | 0.9579  |  |
| 9003.hs            | 0.3810          | 0.2978  |  |
| 9004.hs            | 0.5000          | 0.2392  |  |
| 9005.hs            | 0.5952          | 0.0677  |  |
| 9006.hs            | 0.6429          | 0.0136  |  |
| Overall p ≤ 0.0385 |                 |         |  |

Table 4 REMOTE VIEWING RESULTS FOR VIEWER 807 (U)

| Session                  | Figure of Merit | p-value |  |
|--------------------------|-----------------|---------|--|
| 9001.cr                  | 0.0000          | 1.0000  |  |
| 9002.cr                  | 0.3333          | 0.2267  |  |
| 9003.cr                  | 0.5208          | 0.0240  |  |
| 9004.cr                  | 0.0833          | 0.7494  |  |
| 9005.cr                  | 0.3750          | 0.1321  |  |
| 9006.cr                  | 0.1333          | 0.5911  |  |
| Overall p ≤ 0.1895, n.s. |                 |         |  |

(U) From the FM analysis performed for our FY 1984 experiment, we determined that by computing the p-value for each FM we could determine an average p for each viewer and for all sessions combined. The overall probability of obtaining that average p-value was then calculated, either by an exact method for small numbers of sessions<sup>7</sup> or by using the central limit theorem for greater than 20 sessions.8 In the current analysis, an additional test of significance, the Fisher Chi-square technique,8 has been added to supplement the probability associated with average p-value for a given series.

The overall p-values given for each viewer's series as shown in Tables 1 through 4 were calculated using the Fisher Chi-square technique. Averaging all p-values for all sessions yielded p(avg.) = 0.3437. Using the central-limit theorem, the probability associated with that average value is p  $\leq$  0.004. Using the Fisher Chi-square method, a p-value of  $\leq$ 0.0036 was calculated for all 24 sessions, indicating good agreement between techniques. We observed that three out of the four viewers independently produced significant results. Such an outcome is an extremely rare event. If the probability of success is p  $\leq$  0.05, the binomial probability of obtaining three out of four successful results is p  $\leq$  0.00048. These individual and overall remote viewing results are substantially better than were achieved in the FY 1984 study.